

# The Safety Net

A publication of the West Virginia University  
Injury Control Research Center

June 2009

## With Change Comes Growth

### From the Director's Chair:

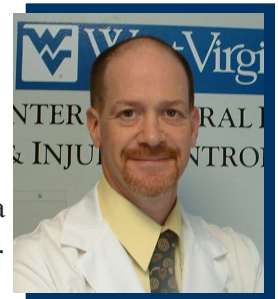
As spring comes to Appalachia, changes are apparent everywhere. The ICRC, too, has undergone a metamorphosis this spring of 2009. As described in this edition of the *Safety Net*, Dr. Jim Helmkamp recently accepted a new position as Chief Epidemiologist in the Denver, CO, field office of the National Institute for Occupational Safety and Health. Jim's outstanding contributions to the ICRC's establishment and development are immeasurable, and he will be greatly missed by all.



We have also recently witnessed the emergence and blossoming phenomena that is typical of springtime. Ekta Choudhary, a student who was partially supported by the ICRC during her dissertation studies, has completed the public health sciences program and received her PhD degree. Please review the accompanying article describing Ekta's recent contributions and successes. As one of only 82 postgraduates selected by the CDC's Epidemiologic Intelligence Service, Ekta now joins a prestigious group of outstanding, young epidemiologists. We wish her continued success as she launches her new career.

While change is never easy, it is inseparable from growth. We now have openings for up to three full-time, tenure-track faculty positions (please see the accompanying position description announcement). We are also very excited to

welcome Dr. Maria Brann as our newest WVU Faculty Affiliate. Dr. Brann, from the Department of Communication Studies, will help focus our translational research efforts, an increasingly important area of emphasis in the injury control field.



Jeffrey Coben

Finally, and fortunately, some things remain the same. Our affiliated faculty continue to produce important new scientific discoveries and remain steadfast in their commitment to injury control research, training, and information dissemination. The accompanying article describing Dr. Ian Rockett's recent work is one excellent example. The ICRC also continues to be blessed by an extremely supportive parent institution, as WVU makes continuing contributions to our progress and success. We also continue to be enriched by a strong network of collaborating partners who generously contribute their time and expertise to help us achieve our mission.

I wish everyone a safe, healthy, and enjoyable spring season '09 and a relaxing summer! Please feel free to contact me at any time if you have any questions or suggestions relating to the ICRC.

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## Dr. James Helmkamp Assumes New Position

After five years of directing the WVU ICRC, James (Jim) Helmkamp, PhD, has stepped down to accept a position as Chief Epidemiologist in the Denver, CO, field office of the National Institute for Occupational Safety and Health (NIOSH). As the first Director of the ICRC when it became one of 12 nationwide CDC Centers of Excellence in injury research, Dr. Helmkamp was instrumental in the Center's growth and development.

Of his decision to leave WVU, Dr. Helmkamp said that he feels ready for new challenges. "From a professional perspective it was time for me to do something different," he said. "I've had tremendous times and support here at WVU for 13 years. I'm certain that I will miss it dearly."

Jeffrey Coben, MD, Professor of Emergency Medicine and Community Medicine, is Dr. Helmkamp's successor as ICRC Director. Dr. Coben has served as the ICRC's Scientific Director and worked closely with Dr. Helmkamp over the last five years.

"All of us wish Jim great success and happiness in his new position," noted Dr. Coben. "Jim Helmkamp was doing translational research long before most others recognized the importance of this type of work. As we move forward, the ICRC will continue to follow this path to ensure that our research is relevant and can help inform necessary policy decisions."

Before becoming ICRC Director in 2004, Dr. Helmkamp was Interim Director, from 2003 to 2004, of the Center for Rural Emergency Medicine. At the time of his departure from WVU, he also was Research Professor in the Department of Community Medicine.

Any retrospective of Dr. Helmkamp's career at WVU must include his seminal research on all-terrain vehicle (ATV) injuries. Over the past 11 years, he has published approximately 25 papers and is nationally recognized as an expert in the area. Although it became the focus of his injury research, Dr. Helmkamp's initial foray into ATV safety was inadvertent.

"I didn't even know what an ATV was," conceded Dr. Helmkamp, who was casually dressed and appeared relaxed recently on his last day as ICRC Director.

At a colleague's urging, Dr. Helmkamp began to examine data on ATV injuries in West Virginia. As he delved deeper into the data, Dr. Helmkamp recognized that ATV injury represented a growing problem in the state. His



*Jim Helmkamp, right, receiving plaque from Dr. Alan Ducatman, Chair of Community Medicine*

first paper on ATV injury, which appeared in the CDC's *Morbidity and Mortality Weekly Report*, described deaths related to the vehicles over a 15-year period. His latest paper on ATV and bicycle deaths is in the May-June 2009, Volume 124, issue of *Public Health Reports*, and another paper on ATV deaths in the elderly is being published currently by the *Southern Medical Journal*.

One byproduct of his research that Dr. Helmkamp cites with pride is its influence on public policy. In 2004, then-Governor Wise talked about ATV safety in his State-of-the-State Address, referring specifically to Dr. Helmkamp's research, which influenced legislation passed that same year regulating ATV use in West Virginia. Specifically, the law prohibits multiple riders and ATV use on certain public roads. It also mandates helmet use and training for children under age 18. Unfortunately, the law has proven difficult to enforce because it does not govern private land, which is the site of many ATV crashes, Dr. Helmkamp noted.

Nevertheless, his findings focused attention on the problem. "I think it helped energize legislators and policy makers to look at the lack of any safety legislation in the state for ATVs," he said.

Dr. Helmkamp cited four main requirements of any new legislation, including a prohibition against use on paved surfaces, mandatory helmet use, single-rider restrictions, and school-based educational programs about ATV safety.

Alan Ducatman, MD, is Professor and Chair of the WVU Department of Community Medicine, where Dr. Helmkamp held an academic appointment.

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## New ICRC Study Exposes Deficiencies in Suicide Data

Suicide prevention efforts may be hindered by incomplete and misleading death certificates, which often omit a prior diagnosis of one of the primary risk factors for suicide: mental disorders, a new study of suicide data quality found.

The investigation, which was published online in the March 18, 2009, *BMC Psychiatry*, also is the first of its kind to identify racial disparities in suicide reporting, revealing that death certificate data on suicides were incomplete for minorities, but not for whites.

“There’s the question of whether the gap in suicide rates between blacks and whites may be totally or partially related to differences in data quality,” explained principal investigator Ian Rockett, PhD, Professor of Epidemiology and Associate Chair of the WVU Department of Community Medicine. “In other words, suicide may be better measured for whites than for blacks.”

At approximately 5 per 100,000 people, the suicide rate for blacks is less than half of that for whites, which is nearly 13 per 100,000. Yet the risk factors for suicide among blacks are roughly equal to those among whites.

One of the greatest risk factors for suicide is depression and other mental disorders. In fact, together with substance-abuse disorders, mental disorders are found in more than 90 percent of completed suicides, according to the National Institute of Mental Health. Other risk factors include stressful events in combination with mental disorders and/or substance abuse, a family history of mental disorders and/or substance abuse, a family history of suicide, physical or sexual abuse, and owning firearms, which are used in more than half of all suicides.

Dr. Rockett and his co-researchers analyzed data from more than 140,000 death certificates of people who had committed suicide during the period from 1999 to 2003. What they found was strong evidence of underreporting of contributing

conditions like depression and schizophrenia. They obtained their data from the National Center for Health Statistics.

Suicide is ranked as the 11<sup>th</sup> leading cause of death in the United States, claiming more than 33,000 lives in 2007 – nearly twice as many as homicide, which was responsible for more than 18,000 deaths and is ranked the 15<sup>th</sup> leading cause of death, according to the CDC’s National Center for Health Statistics. Despite its higher prevalence, suicide does not garner the same level of publicity or preventive efforts, perhaps because it remains highly stigmatized by society, said Dr. Rockett.

“I think that there’s a lot of denial around suicide, for starters,” he explained. “We also understand why society views homicide very differently. We don’t like the idea of murderers on the loose.

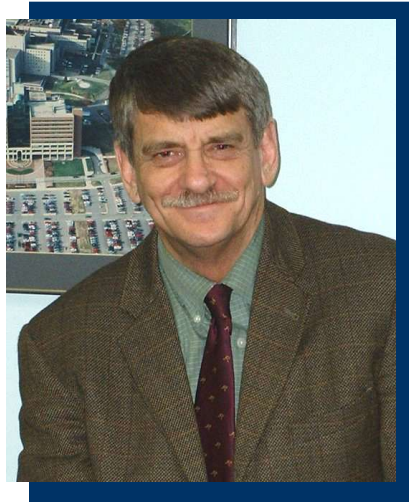
Concern about suicide data quality is not new. A 2002 Institute of Medicine report found that suicide data are seriously deficient and that improvements are needed nationally in surveillance and reporting.

“The Institute of Medicine has documented that half of the people who commit suicide have been diagnosed with a mental disorder, but death certificates register little of this history,” Dr. Rockett said. “Less than 10 percent of people who committed suicide had a record of mental disorder on their death certificates. It’s a major gap.”

The problem with incomplete death certificate data is that they may hinder prevention strategies. Dr. Rockett is now looking at possible

suicides, which may be hidden under various cause-of-death labels, including poisoning, drowning, injury of undetermined intent, and the vague category called “ill-defined and unknown causes.” The goal of these investigations is to uncover any discrepancies in psychiatric co-morbidity between population groups with the aim of identifying deficiencies in reporting and, subsequently, of enhancing prevention and treatment.

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*Ian Rockett*

*“Less than 10 percent of people who committed suicide had a record of mental disorder on their death certificates. It’s a major gap.”*

*--Ian Rockett*

## First Student Completes WVU Public Health Doctoral Program

### *Spotlight on Ekta Choudhary*

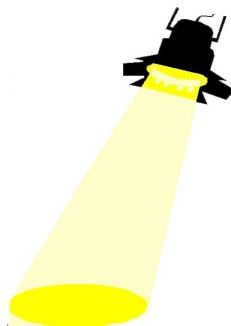
Ekta Choudhary, a student in WVU's doctoral program in public health, successfully defended her thesis this spring to become the first student to receive a PhD degree from the new program.

"It feels good, definitely," Dr. Choudhary said, laughing. "I promised myself that I was going to finish within the first three years if I could, and I did. It still hasn't really sunk in yet that I'm actually done with school. I don't feel that I'm no longer a student."

Not only is she no longer a student, Dr. Choudhary is one of 82 postgraduates selected this year to participate in the CDC's competitive and prestigious Epidemiologic Intelligence Service (EIS). This summer, she will begin the two year postgraduate program in applied epidemiology at the CDC's National Center for Environmental Health. As an EIS officer, Dr. Choudhary will gather field data related to natural disasters such as floods and fires, as well as conduct analysis and research.

"We are very pleased that the ICRC could play a role in Ekta's education, and we're now looking forward to her continuing contributions to the field of injury control," commented ICRC Director Jeff Coben, MD.

In 2006, Dr. Choudhary was one of the first five students to enroll in WVU's new interdisciplinary doctoral program in

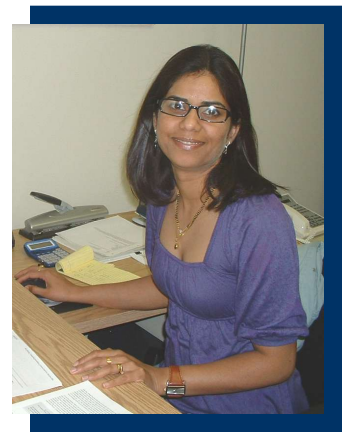


public health sciences. She wrote her dissertation about the effects of sexual violence victimization on physical and mental health, and how these effects differ between males and females.

Last summer, Dr. Choudhary was the first injury specialist intern to work with the National Park Service, spending six weeks on the island of St.

John, U.S. Virgin Islands to help implement a visitor safety plan. She feels that this experience was invaluable in terms of honing her epidemiologic skills and may have helped make her a competitive applicant to the EIS.

Alan Ducatman, MD, Professor and Chair of the WVU Department of Community Medicine, agrees. "We are excited and impressed by the achievements of our first PhD in public health graduate, Ekta Choudhary," he said. "With excellent mentorship from ICRC faculty, Dr. Choudhary has done a great job by creating new liaisons between WVU and the growing safety research enterprise at the National Park Service, where she had a very successful internship. For those who have worked with Dr. Choudhary, watching her move from strength to strength is an expectation and a pleasure."



*Ekta Choudhary*

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## ICRC Scientists Present at National Translational Research Meeting

ICRC scientists joined colleagues from throughout the world on March 5-6, 2009, at a national conference on translational research sponsored by the Emory University Center for Injury Control, in collaboration with the Society for Advancement of Violence and Injury Research and the CDC's National Center for Injury Prevention and Control.

Innovative ways to translate research findings into effective strategies for injury prevention and healthcare were the focus of the meeting, which was held in Atlanta, GA. Translational research has become an increasingly important aspect of the injury control field, as researchers and funders seek to determine the best methods of implementing interventions in communities, healthcare settings, and with policy makers.

Presenters from the WVU ICRC included doctoral student Danielle Davidov, who described ongoing participatory-based research being conducted within the context of the Nurse Family Partnership program; Ekta Choudhary, PhD, who presented research on the health status ramifications of male sexual violence victimization; and Motao Zhu, PhD, Assistant Professor in the Department of Community Medicine, who discussed findings on injury-related hospitalizations in rural China.

## James Helmkamp Assumes New Position

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“Manufacturers, safety experts, and legislators have all reacted to Jim's important injury control work with recommended changes in policy,” he said. “Many of these have been implemented over the years, and more will be accepted in years to come. Jim Helmkamp has saved lives, prevented injuries, and improved ATV safety through his work at the WVU ICRC. This work -- saving lives, preventing injury -- is in the best traditions of safety studies.”

In addition to ATV injury prevention, other successful projects that Dr. Helmkamp helped initiate included a program to reduce logging injury in West Virginia; an alcohol abuse intervention implemented in emergency departments and other clinical settings; and a variety of other pilot projects supported under the auspices of the ICRC.

Dr. Helmkamp brings more than a quarter century of experience as an injury scientist to his new job. As Chief

Epidemiologist, he will be the firsthand contact between NIOSH and people seeking help to prevent occupational injuries. His territory will include the 17 contiguous western states, Alaska, and Hawaii.

What changes would Dr. Helmkamp like to see in the injury prevention field? He said that he wishes more people would recognize how critical injury prevention is to public health, pointing out that injuries kill more people from the ages of 1 to 45 than anything else, yet receive far less research and prevention money than many chronic diseases like heart disease, cancer, and AIDS.

“It’s probably pennies on the dollar,” Dr. Helmkamp said. “Yet why shouldn’t we try to prevent the years of life lost due to injuries in the first four decades of life so people can live long enough to get the chronic disease?”

## Study Exposes Deficiencies in Suicide Data

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“Death certificates can provide us with a national picture so they’re potentially very important for both surveillance and for prevention,” he said.

Dr. Rockett, who received his PhD in demography from Brown University in 1978, and his master’s in public health from Harvard University in 1986, has not always studied suicide data quality. He began his research career as an injury epidemiologist in the mid-1980s with the Rhode Island Department of Health, where he directed the injury control program. In an effort to institute the first universal seat belt use law in the country, he conducted a statewide hospital emergency department study of motor vehicle trauma. Although ultimately not the first state to pass such a law -- that honor went to New York -- Rhode Island did pass a seat belt use law in 1991, and Dr. Rockett’s data on

motor vehicle trauma was instrumental in evaluating the New York law.

In his spare time, Dr. Rockett began examining international injury mortality data from the United States, France, what was then West Germany, New Zealand, and Australia - his country of birth. Dr. Rockett, whose accent, which he calls “mid-Pacific,” has softened after many years in the United States, says that his interest in suicide data quality was piqued as he investigated mortality data on motor vehicle trauma, homicides, falls, and suicides, but that the main catalyst was a revelation he had one day while sitting at his desk. He remembers looking at two graphs, one showing suicide rates for women in Japan, the other showing Japanese drowning rates by age.

“The curves in those graphs had the same shape,” Dr. Rockett said. “So I

then said, ‘aha, I wonder if drowning is a common method of suicide among Japanese females?’”

He ultimately wrote a paper suggesting that drowning deaths among elderly women in Japan may in fact have been misclassified suicides, and later began to focus his research on suicide data quality in general and discrepancies between death certificate records in particular.

For the full article on the 2009 suicide data quality study, see:

<http://www.biomedcentral.com/content/pdf/1471-244X-9-10.pdf>.

For further information on suicide, see: <http://www.nimh.nih.gov/health/publications/suicide-in-the-us-statistics-and-prevention/index.shtml>.

## ICRC Seeking New Faculty

The WVU ICRC seeks applicants for up to three full-time tenure-track faculty positions (open rank), to participate in the expansion of a multidisciplinary injury research program. The successful candidates will serve as Core Faculty of the WVU ICRC – one of thirteen CDC-funded injury centers nationwide.

The ICRC is located within the School of Medicine at the Robert C. Byrd Health Sciences Center, in Morgantown, West Virginia.

This recruitment is intended to expand the depth of the ICRC and also fit within the WVU Health Sciences Center's Strategic Research Plan, which provides guidance for biomedical, public health and translational clinical research consistent with the NIH Roadmap. ICRC faculty will also participate in a recently established Clinical and Translational Science Institute. While candidates from any background relevant to the science of injury control are encouraged to apply, we seek to align these recruitments with specific population health needs in West Virginia, with emphasis on injury among the elderly population, neurological trauma, and prescription drug abuse/poisonings.

Applicants for these positions should possess a terminal degree and have academic preparation/expertise in one or more of the following: epidemiology, biostatistics, social and behavioral sciences, population health, health services research, acute injury care, or translation/ dissemination research. Candidates should be able to collaborate with multidisciplinary research teams of basic, clinical, and applied researchers, and also develop their own program of funded research.

The ICRC has close ties with multiple departments and research centers,

including the CDC-funded Prevention Research Center, the Center on Aging, the HRSA-funded West Virginia Rural Health Research Center, and the Collaborative Health Outcomes Research of Therapies and Services Center. We are adjacent to, and a frequent research and educational collaborator with CDC's National Institute for Occupational Safety and Health (NIOSH). The Department of Community Medicine has several national research programs, a thriving, CEPH-accredited MPH program, and a new PhD program in Public Health Sciences with multiple specialty tracks.

The Department of Pharmaceutical Systems and Policy has a well-established PhD program in Health Outcomes Research.

Candidates should have a record of, or significant promise for, excellence in research and teaching in relevant areas, as well as peer-reviewed publications.

Experience and participation in NIH or other federally-funded research is an advantage. Primary responsibilities will be to develop and maintain an independently funded research portfolio that is consistent with the objectives of the ICRC. All new hires are expected to achieve NIH or comparable competitive extramural funding within four years. A variety of support mechanisms are in place to help achieve this goal, including involvement in our current and future Center grant activities.

Graduate teaching and mentorship is expected, and excellent communication skills are important. Each new position comes with a competitive salary and start-up package. A faculty appointment in an appropriate department within the WVU Health Sciences Center will be provided, commensurate with the individual's background and experience.

West Virginia University is a comprehensive, land-grant, Carnegie-designated Doctoral Research/Extensive public institution, with approximately 22,000 undergraduates plus 5,500 graduate and professional students. The Health Sciences Center includes the Schools of Medicine, Pharmacy, Dentistry and Nursing, each of which offers professional and graduate training programs. Patient care facilities include a 460-bed teaching hospital, a Level I trauma center, and a 70-bed psychiatric hospital.

Morgantown is consistently and broadly rated as one of the best small towns in the U.S., with affordable housing, excellent schools, a picturesque countryside, many outdoor recreational activities, and close proximity to major cities, such as Pittsburgh and Washington, DC. The WVU Health Sciences Center is participating in a major research facility and faculty expansion.

Interested candidates should submit a cover letter describing their research and teaching experience, listing of contact information for three references, and curriculum vitae to Jeffrey H. Coben, MD, Director, WVU Injury Control Research Center, Robert C. Byrd Health Sciences Center, PO Box 9151, Morgantown, WV 26506-9151 or submit by email to [jcoben@hsc.wvu.edu](mailto:jcoben@hsc.wvu.edu) and cc: [dfulaytar@hsc.wvu.edu](mailto:dfulaytar@hsc.wvu.edu).

The search will remain active until the positions are filled.

WVU is an Affirmative Action/Equal Opportunity Employer.

Women and minorities are encouraged to apply.

## First Student Completes Doctoral Program

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Upon completing her EIS fellowship, Dr. Choudhary says that she would like to continue her research on male sexual violence victimization, which is an area that in the past has not received much attention. Her long-term goal is to work in academia as a professor conducting injury research and teaching, she said.

“The area of injury epidemiology is something that I like working with,” Dr. Choudhary said. “I enjoy working with the data and I enjoy working with the product that I get out of the research.”



**Injury Control Research Center**